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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,856	03/05/2002	Mark S. Leung	12361-8US	8363

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EXAMINER

ROANE, AARON F

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,856

Applicant(s)

LEUNG ET AL.

Examiner

Aaron Roane

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/29/2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-8, 10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rittman, III et al. (USPN 6,575,969 B1) in view of Sluijter et al. (USPN 5,433,739).

Regarding claims 1, 3 and 10, Rittman, III et al. disclose a system comprising a plurality of probes (101, 201, 301, 401 or 501) wherein the distal portions of each probe comprises an energy delivery means (an electrical "rf element" see col. 2, lines 12-57), and a cooling means (122 with 141) for cooling tissue adjacent energy delivery means, see col. 2-5 and figures 1-11. Rittman, III et al. further disclose that the probe has an introducer (102) that is insulated, see col. 4 and figure 1. Additionally, the examiner takes official notice to an external portion of at least one probe being insulated. It is inherent that all electrical conducting wires used to connect the probe to the control unit are insulated. Rittman, III et al. fails to disclose a temperature sensor located at the distal end of the introducer. Sluijter et al. disclose a method and apparatus for treating intervertebral disc

and teach providing the thermal probe (306) with an introducer (301) in order to facilitate introduction of the probe into the tissue and the placement of a temperature sensor (311) at the distal end of the introducer in order to monitor the temperature of the tissue during treatment, see col. 9, line 59 through col. 10, line 41 and figures 3 and 4. Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the invention of Rittman, III et al., as taught by Sluijter et al., to provide each thermal probe with an introducer in order to facilitate introduction of the probe into the tissue and the placement of a temperature sensor at the distal end of the introducer in order to monitor the temperature of the tissue during treatment.

Regarding claims 5, 6 and 12, Rittman, III et al. further disclose that the system is capable of providing ablative energies and also of monitoring the temperature via at least one temperature sensor (104), see col. 1 and 2, especially col. 12, line 44 through col. 16, line 37. Therefore, the invention of Rittman, III et al. is fully capable of providing energy delivery sufficient to perform the intended use or desired result and capable of maintaining a particular temperature.

Regarding claim 7, Rittman, III et al. further disclose an impedance meter (844) to determine the impedance between the probes, see col. 17, line 34 through col. 22, line 18 and figure 8.

Regarding claim 8, Rittman, III et al. disclose the claimed invention, see figure 8.

Regarding claim 13, Rittman, III et al. disclose the claimed invention. Any shape disclosed by Rittman, III et al. provides the directed energy between the probe tips.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rittman, III et al. (USPN 6,575,969 B1) in view of Sluijter et al. (USPN 5,433,739) as applied to claim 1 above, and further in view of Eggers et al. (USPN 5,928,159).

Regarding claim 4, Rittman, III et al. in view of Sluijter et al. disclose the claimed invention except for explicitly reciting the frequency of operation is 20 kHz. It well known in the art to provide electrical energy delivery in a variety of wavelengths including 20 kHz depending on the desired effect. Eggers et al. disclose a system (100) for treating tumors comprising a first and second elongate probe (110), wherein the distal end of the probe comprises a energy delivery means (electrodes on 113), see col. 7, lines 18-67 and figure 5. The energy delivered by the energy delivery means is in the form of radio frequency electrical current with a frequency of 20 kHz to 20 MHz, see col. 5, lines 58-67. Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the invention of Rittman, III et al., as is well known in the art and shown by Eggers et al., to provide electrical energy delivery in a variety of wavelengths including 20 kHz depending on the desired effect.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rittman, III et al. (USPN 6,575,969 B1) in view of Sluijter et al. (USPN 5,433,739) as applied to claim 1 above, and further in view of Panescu et al. (USPN 6,053,912).

Regarding claim 11, Rittman, III et al. disclose the claimed invention except for providing a shape control means for changing the shape of the probe. Panescu et al. disclose a device and method comprising an RF electrode (16), a cooling means (40), see col. 4-6 and figures 1-4. Panescu et al. also teach the inclusion of a steering means or shape control means (26 and 38) in order to place the electrode against the desired target tissue, see col. 4 and 5 and figure 1A. Therefore, at the time of the invention, it would have been obvious to modify the invention of Rittman, III et al., as taught by Panescu et al., to include a steering means or shape control means in order to place the electrode against the desired target tissue.

Allowable Subject Matter

Claims 15-18 are allowed.

Response to Amendment

As noted on page 6 of the paper filed on 6/1/2004, Applicant amended claim 1 to include the objected to subject matter of claim 14. However, upon further review and search, art has been

provided to motivate a 103 rejection and teaches the previously objected subject matter. Due to this new grounds for rejection, this action is non final.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Roane whose telephone number is (703) 305-7377. The examiner can normally be reached on 9am - 5pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.R. *A.R.*
September 1, 2004

Roy D. Gibson
ROY D. GIBSON
PRIMARY EXAMINER